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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,977	10/22/2001	George Putti	1375P03US	8469

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EXAMINER

LEYSON, JOSEPH S

ART UNIT	PAPER NUMBER
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1722

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DATE MAILED: 02/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/982,977

Applicant(s)

PUTTI, GEORGE

Examiner

Joseph Leyson

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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1. The status of the parent case on p. 1 of the specification, in the paragraph inserted by the preliminary amendment, should be updated. The examiner suggests deleting the inserted paragraph and replacing it with the following paragraph:

-- This is a divisional of U.S. Patent Application No. 09/007,152 filed January 14, 1998, now U.S. Patent No. 6,331,069. --

2. In the Brief Description of the Drawings, applicant has two descriptions for Fig. 3. The examiner suggests deleting one.

3. Claim 24 is objected to because of the following informalities: in claim 24, line 1, "extension" should be changed to --extrusion-- for proper spelling. Appropriate correction is required.

4. Claim 22 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 22 is redundant to claim 21 because claim 21 already recites the second section having "flights".

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 19, 20 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 19, line 13, "halves" should be changed to --components--.

In claim 24, line 2, --the-- should be inserted before "flights" for antecedent basis clarity.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Canada (1,205,985) in view of Anders(-410) and Bredeson(-013).

Canada (1,205,985) discloses a travel extrusion machine for forming hollow core sections including a frame 20, a feed chamber (see figures) mounted on the frame 20 for receiving material from a hopper 26, a molding chamber (see figures)

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spaced apart and adjacent to the feed chamber, a mandrel 86 in the molding chamber, a vibrator 28, 32 mounted adjacent to the molding chamber, and a rotatable spiral conveyor (see fig. 2b) extending from the feed chamber to the molding chamber, the conveyor having a hollow shaft 79 adjacent to the mandrel 86 and a section of the spiral conveyor releasably connected to the hollow shaft 79, the section including two components 82a, 82b on opposite sides of the hollow shaft 79. However, Canada (1,205,985) does NOT disclose a non-rotation locking device between the components and the hollow shaft, at least one connector interconnecting and engaging the two component halves, the locking device being a key and a keyway, the components of the section having corresponding apertures on opposite sides of the shaft, the at least one connector being two bolts extending between the apertures, or the shaft being between the bolts.

Anders(-410) discloses a rotatable spiral conveyor. A section of the spiral conveyor is releasably connected to a shaft, the section including two components 7a, 7b on opposite sides of the shaft, two connectors 8a, 8b interconnecting and engaging the two component halves 7a, 7b, the components 7a, 7b of the section having corresponding apertures on opposite sides of the shaft (fig. 2), and the connectors being two bolts 8a, 8b

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extending between the apertures, the shaft being between the bolts 8a, 8b.

Bredeson(-013) discloses a rotatable spiral conveyor. A section of the spiral conveyor is releasably connected to a shaft 30, the section including two components 50 on opposite sides of the shaft 30, a non-rotation locking device between the components 50 and the shaft 30, the locking device being a key and a keyway 66.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the machine of Canada (1,205,985) such that the components have non-rotation locking devices defined by keys and keyways between the components and the hollow shaft, such that the components have connectors defined by two bolts interconnecting and engaging the two component halves and have corresponding apertures on opposite sides of the shaft, the two bolts extending between the apertures, and the shaft being between the bolts because such modifications are well known in the art, because such keys and keyways would enable the components to rotate with the shaft as disclosed by Bredeson(-013), and because such bolts and apertures would provide means for removably securing the components to the shaft as disclosed by Anders(-410).

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9. Claims 21, 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Canada (1,205,985) in view of Wise(-619).

Canada (1,205,985) discloses a travel extrusion machine for forming hollow core sections including a frame 20, a feed chamber (see figures) mounted on the frame 20 for receiving material from a hopper 26, a molding chamber (see figures) spaced apart and adjacent to the feed chamber, a mandrel 86 in the molding chamber, a vibrator 28, 32 mounted adjacent to the molding chamber, a rotatable spiral conveyor (see fig. 2b) extending from the feed chamber to the molding chamber, and a core mandrel 94, the conveyor having a first section within the feed chamber having flights 78 with a first constant external diameter and a third section extending downstream and having flights 80 which taper divergently from the first diameter. The spiral conveyor has an axis of rotation, flights of the first section having leading and trailing edges which are sloped relative to the axis of rotation. However, Canada (1,205,985) does not disclose the conveyor having a second section adjacent to the molding chamber having flights with a second constant external diameter.

Wise(-619) discloses a spiral conveyor having a second section 94 adjacent a molding chamber having flights with a

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second constant external diameter (col. 5, lines 12-16). The spiral conveyor has an axis of rotation, and the flights of the second section have leading edges which are perpendicular to the axis of rotation. The flights of the second section 94 are on the core mandrel and causes concrete material therein to flow radially outwardly as indicated by arrow 104 resulting in a dense smooth concrete slab (col. 5, line 49, to col. 6, line 3).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the machine of Canada (1,205,985) such that the conveyor includes a second section with flights on the core mandrel, as recited by Wise(-619), because such a modification would cause concrete material therein to flow radially outwardly resulting in a dense smooth concrete slab. Note that the diameter of the flights of the second section would be greater than the first diameter.

10. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Canada (1,205,985) in view of Wise(-619) as applied to claims 21, 22 and 24 above, and further in view of Anders(-410).

Anders(-410) discloses a rotatable spiral conveyor. A section of the spiral conveyor is releasably connected to a shaft, the section including two longitudinally divided components 7a, 7b on opposite sides of the shaft. Connectors

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8a, 8b connect the two components 7a, 7b to each other, the components 7a, 7b of the section having corresponding apertures on opposite sides of the shaft (fig. 2), and the connectors being two bolts 8a, 8b extending between the apertures.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further modify the machine such that the second section is in two longitudinally divided components, the components being connected to each other by connectors which are spaced-apart from the third section, because such a modification for a spiral conveyor is well known in the art as disclosed by Anders(-410) and would enable the second section to be removably secured.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. GB (1,342,601), Loomans(-522), Bunn(-565), Putti(-860), Putti(-848), Goetjen(-556) and Ellis et al.(-897) are cited as of interest.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Leyson whose telephone number is (703) 308-2647. The examiner can normally be reached on M-F(8:30-6:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (703) 308-0457. The fax phone numbers for the

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organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

jl

jl
January 26, 2003

James P. Mackey
JAMES P. MACKEY
PRIMARY EXAMINER

1/27/03